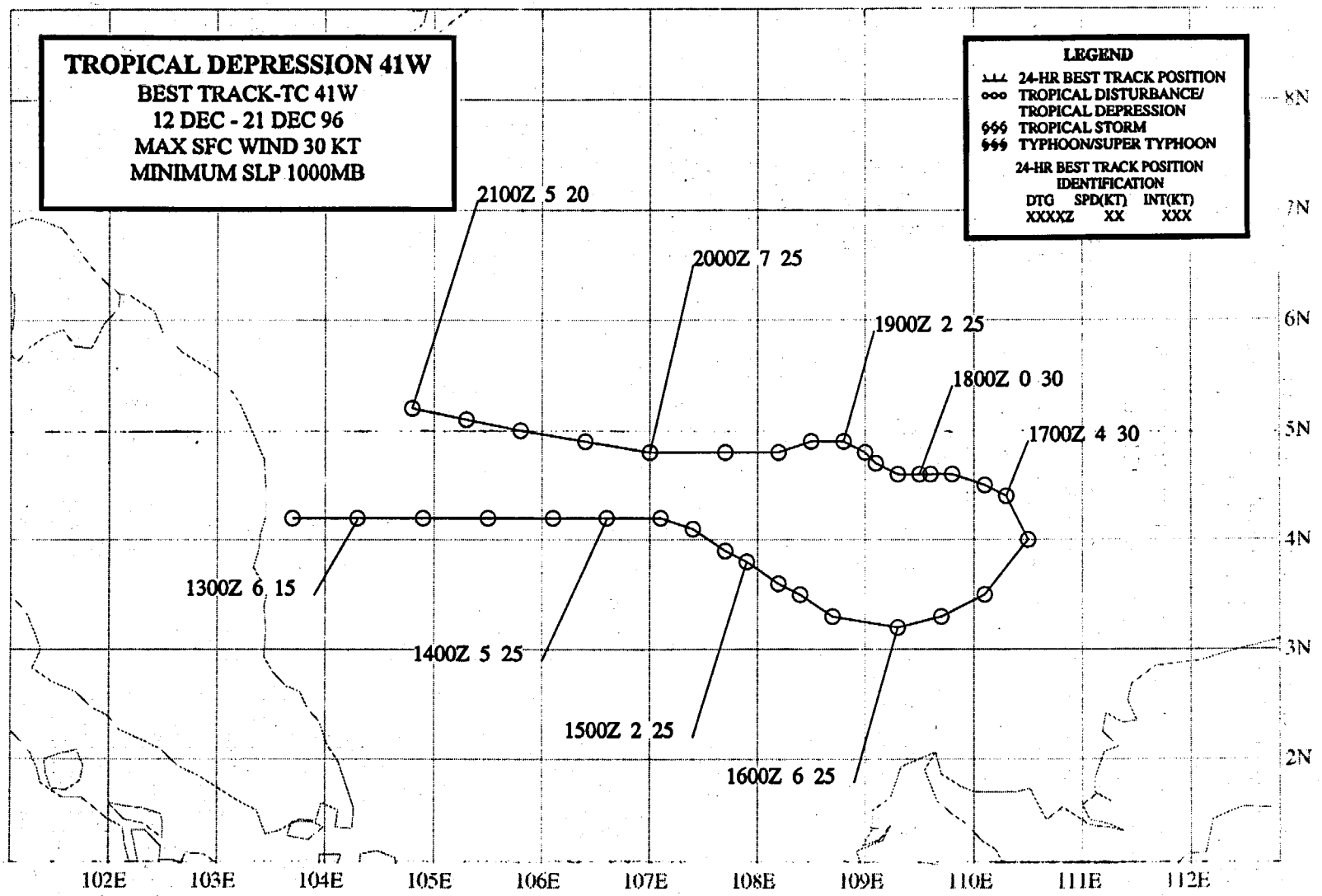
TROPICAL DEPRESSION 41W
BEST TRACK-TC 41W
12 DEC - 21 DEC 96
MAX SFC WIND 30 KT
MINIMUM SLP 1000MB
LEGEND
24-HR BEST TRACK POSITION
TROPICAL DISTURBANCE/ TROPICAL DEPRESSION
TROPICAL STORM
TYPHOON/SUPER TYPHOON
24-HR BEST TRACK POSITION IDENTIFICATION
DTG SPD(KT) INT(KT)
XXXXZ XX XXX
2100Z 5 20
2000Z 7 25
1900Z 2 25
1800Z 0 30
1700Z 4 30
1600Z 6 25
1500Z 2 25
1400Z 5 25
1300Z 6 15
8N
7N
6N
5N
4N
3N
2N
102E
103E
104E
105E
106E
107E
108E
109E
110E
111E
112E

TROPICAL DEPRESSION 41W

After Tropical Depression 40W dissipated over the southern Philippines, there was a break in TC activity in the WNP until 10 December, when an area of deep convection became persistent in the South China Sea. On 13 December, synoptic data indicated a weak LLCC (located east of the Malay peninsula) was associated with this area of deep convection. The system moved eastward along the northern edge of a equatorial westerly wind burst (WWB) (Figure 3-41-1). Based upon synoptic data indicating a well-defined LLCC with maximum sustained wind speeds of 25 kt (13 m/sec), the first warning on Tropical Depression (TD) 41W was issued, valid at 140600Z December. Remarks on the first warning included:

" . . . The low-level circulation is in an area of convergence between the northeasterly monsoon and an equatorial westerly wind burst. Development is being aided by this strong WWB. . ." The strength and depth of the WWB to the south of TD 41W appeared to be the dominant steering mechanism, and TD 41W moved eastward until 16 December when the TC approached the northwest coast of Borneo. Here, the TC gradually turned northward and then westward as it came under the steering influence of the northeast monsoon. After doubling back toward the Malay peninsula, the TC continued westward and dissipated on 21 December when located near the location where it formed a week earlier. Strong upper-level easterlies persisted throughout the lifetime of TD 41W, and the resultant vertical wind shear likely limited the intensity of TD 41W to its peak of 30 kt (15 m/sec).

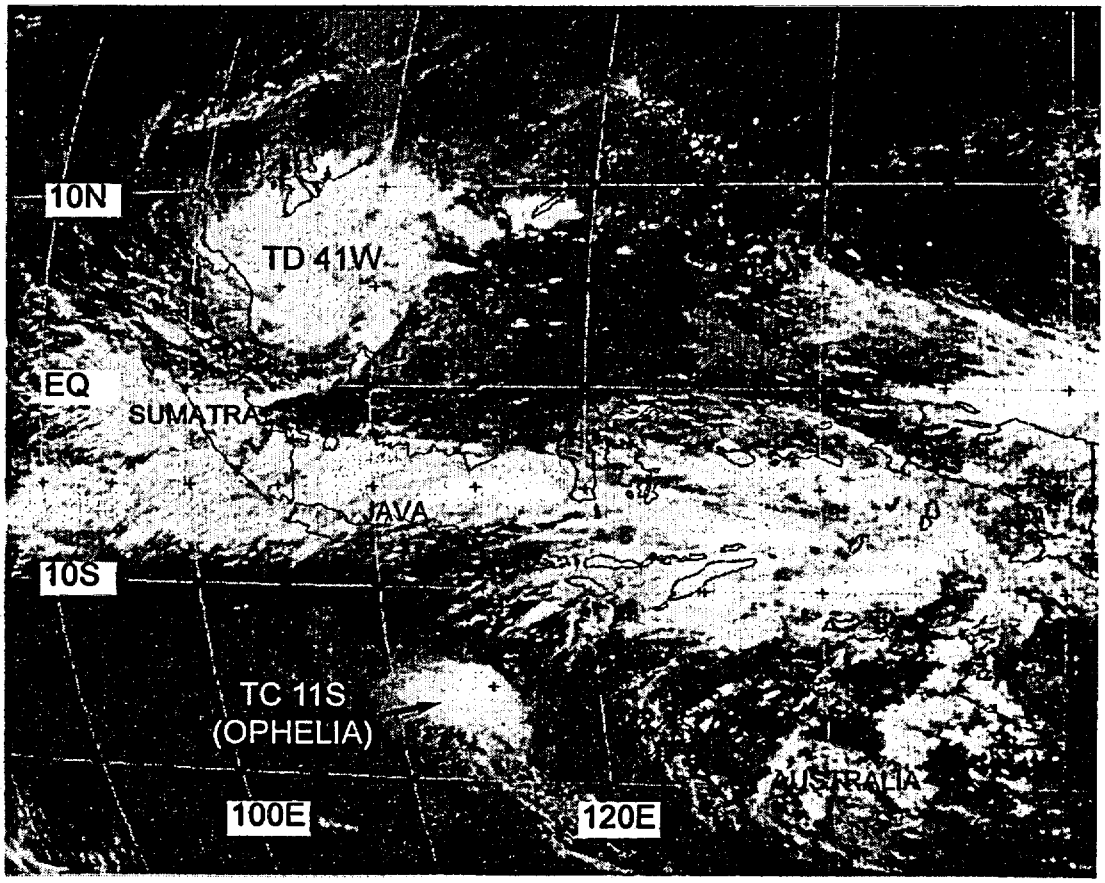

Figure 3-41-1 An extensive east-west cloud band associated with a equatorial WWB separates TD 41W (located in the South China Sea) and TC 11S (Ophelia) located in the Southern Hemisphere to the south of Java (170531Z December infrared GMS imagery).